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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,419	10/17/2000	Gordon MacKay	CISCP261	4308
22434	7590	07/03/2007		
BEYER WEAVER LLP			EXAMINER	
P.O. BOX 70250			HALIYUR, VENKATESH N	
OAKLAND, CA 94612-0250				
			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/691,419	<b>Applicant(s)</b> MACKAY ET AL.	
	<b>Examiner</b> Venkatesh Haliyur	<b>Art Unit</b> 2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-44 (claim 1-21 are canceled) is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-27, 29-38, 40-44 is/are rejected.
- 7) ☐ Claim(s) 28 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on 4/16/2007 is insufficient to overcome the rejection of claims 22-44 based upon Meier et al in view of McGuire et al reference communicated via last office action of 01/16/2007. Rejection follows
2. Claims 22-44 are pending in the application. Claims 1-21 are canceled.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 29-30,40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Meier et al [US Pat: 5,295,154].

Regarding claims 29-30,40-41, Meier et al disclosed a method for detecting a loop in a network of devices, at least a plurality of the devices being capable of transmitting and reading auto-negotiate messages (**HELLO/ATTACHED/LISTEN/UNATTACHED messages**) using a communication protocol supported by the plurality of

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devices (**Fig 1, col 3, lines 45-64**) each auto-negotiate message being characterized by a plurality of fields, each field being represented by a number of bits (**col 3, lines 10-62**), the method comprising: sending a loop detect message (**send spanning tree messages to form nodes without loops**) from a first device (**gateway, item 20 of Fig 1**) to a second device (**bridge, item 42 of Fig 1**) in the plurality of network of devices (**col 3, lines 18-26**), wherein the loop detect message includes the same number of fields as an auto-negotiate message (**HELLO/LISTEN messages contains information about sending/destination addresses, node ID, distance and other node parameters in the similar fields of these auto messages, col 3, lines 37-47**), each field of the loop detect message including the same number of bits as an associated field in the auto-negotiate message and wherein the one or more components are further configured to, in a field in which an auto-negotiate message would ordinarily have a first content according to the protocol, place a second content identifying the message as a loop detect message (**indicate whether a device is ATTACHED or UNATTACHED during optimal spanning tree determination, col 3, lines 48-62**).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

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a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 22-27,42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al [US Pat: 5,295,154] in view of McGuire et al [US Pat: 6,151,326].

Regarding claim 22,33,44 Meier et al in the invention of "Radio Frequency Local Area Network" disclosed a method for handling a communication in a network (**Fig 1, col 2, lines 45-68, col 3, lines 1-68**) of nodes, each node having an associated identification that is unique from other identifications in the network of nodes, the method comprising: receiving, at a first node (**gateway or root node, item 20 of Fig 1**), a communication (**HELLO/LISTEN/ATTACH/UNATTACHED**) from a second node (**bridge, item 44 of Fig 1, col 2, lines 45-58**), wherein the communication includes an identification (**node ID, col 9, lines 1-10**); determining at the first node, whether the identification included (**distance information**) in the communication is closer to, equidistant from, or further from a predetermined identification value than an identification associated with the first node (**col 10, lines 1-68**); if the identification included in the communication is closer to the predetermined identification value (**CHANGE-THRESHOLD level**) than the identification associated with the first node, sending, from the first node to a third node (**bridge, item 50 of Fig 1**), a communication including the identification that was included in the communication received from the second node (**col 11, lines 1-20**); if the identification included in the communication is further (**distance/path cost**) from the predetermined identification value than the identification associated with the first node, sending, from the first node to a third node, a communication including the identification associated with the first node (**col 9, lines**

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**1-68)** ; and if the identification included in the communication is equidistant (**hop count**) from the predetermined identification value as the identification associated with the first node to prevent loops in the network (**col 4, lines 1-50**), but fails to conclude that a loop exists in the network.

However, McGuire et al, in the invention of "Method and Apparatus for Automatic Device Segmentation and Port-To-Segment Distribution" disclosed a method for detection and prevention of loops in a network (**Fig 3, col 7, lines 5-37**).

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the method of detecting loops in a network as taught by McGuire et al in the system of Meier et al for detecting loops in the network. One is motivated as such in order to use a loop detection method to avoid formation of closed loops in the network with in which messages will circulate endlessly thereby reducing the throughput of the network.

Regarding claims 23,31,34, Meier et al disclosed that the first, second, and third nodes are repeaters (**col 7, lines 15 – 45**).

Regarding claims 24-27,32,35-38,42-43, Meier et al disclosed that the identification associated with the first node is a hardware address (**MAC**) of a network device coupled to the first node (**col 3, lines 36-45,col 15, lines 50-67,col 16, lines 1-12**) and the network device is a switch (**network controller, item 14 of Fig 1**) and the network device is a Gigabit Ethernet switch (**High Speed connections, col 10, lines 14-25**).

***Allowable Subject Matter***

7. Claims 28,39, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments filed on 4/16/2007 for rejection of claims 22-44 communicated via office action of 01/16/2007 have been fully considered but they are not persuasive. Examiner respectfully traverses the Meier et al reference as follows;

With respect to applicant's argument that Meier fails to teach or suggest "determining, at the first node, whether the identification included in the communication is closer to, equidistant from, or further from a predetermined identification value than an identification associated with the first node and making comparisons of node IDs, let alone making a comparison at one node between that node's ID, a node ID sent to that node, and a predetermined node ID value, However, Meier et al suggested each node in the network is assigned a unique network service address and node type identifier to distinguish between different nodes and different node types to determine distances from root node (**col 3, lines 41-47**) and determining distances of nodes closest to root node within the range of certain nodes (**nodes one hop away from root node, col 4, lines 1-50**).

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached @ (571)-272-7493. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.



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11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Patent Examiner

*UH* 06/25/07

*Wing Chan*  
6/23/07

WING CHAN  
SUPERVISORY PATENT EXAMINER